

**DECISION  
AND  
FINDING OF NO SIGNIFICANT IMPACT**

**Aquatic Rodent Damage Management in Oklahoma**

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA-APHIS), Wildlife Services (WS) program responds to requests for assistance from individuals, organizations and agencies experiencing damage caused by wildlife in Oklahoma. WS has prepared an environmental assessment (EA) that analyzes alternatives for managing damage caused by aquatic rodents (beaver, nutria, and muskrat) in the state of Oklahoma. Ordinarily, according to APHIS procedures implementing the National Environmental Policy Act (NEPA), individual wildlife damage management actions are categorically excluded (7 CFR 372.5(c), 60 Fed. Reg. 6000-6003, 1995). An EA was prepared in this case to facilitate planning, interagency coordination, and the streamlining of program management, and to clearly communicate with the public the analysis of cumulative impacts. The predecisional EA released by WS in November 1998 documented the need for aquatic rodent damage management (ARDM) in Oklahoma and assessed potential impacts of various alternatives for responding to aquatic rodent damage problems. The EA is tiered to the programmatic Environmental Impact Statement (EIS) for the Wildlife Services Program<sup>1</sup> (USDA 1994).

WS's proposed action was to continue the current program of ARDM which allows for the use of all methods, both nonlethal and lethal, to protect agriculture, property, natural resources, and human health and safety from damage caused by aquatic rodents. Based on the analysis in the EA, I have determined that there will not be a significant impact, individually or cumulatively, on the quality of the human environment from implementing the proposed action of continuing the program as proposed, and that the action does not constitute a major federal action.

**Public Involvement**

Following interagency review of a preliminary draft of the EA, a predecisional EA was prepared and released to the public for a 30-day comment period. The predecisional EA was sent to all American Indian Tribes in Oklahoma, to consulted state and federal agencies, and to other interested organizations. Twenty-five copies were sent to the Oklahoma Department of Libraries to be available for public review. Notice of availability of the predecisional EA was also published in two major newspapers in the State on November 17, 18, and 19, 1998. One comment letter was received in response to the predecisional EA. Some of the comments indicated areas that warranted additional clarification or treatment. These are:

1. The "Nonlethal Required Before Lethal" alternative should be a mandate.

As stated in the EA, personnel experienced in ARDM can generally determine when and where nonlethal control techniques would work, and this alternative could result in the use of methods that are known to be ineffective, or would have little chance of being effective, in certain situations. As outlined in the programmatic EIS (Ibid.), WS practices an Integrated Wildlife Damage Management approach that requires field personnel to evaluate all methods and utilize nonlethal methods where practical, cost

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<sup>1</sup> USDA (U.S. Department of Agriculture), Animal and Plant Health Inspection Service (APHIS), Animal Damage Control (ADC). 1994. Animal Damage Control Program, Final Environmental Impact Statement. Anim. Plant Health Inspection Serv., Anim. Damage Control. Hyattsville, MD. Volume 1, 2 & 3.

effective, efficient and efficacious. WS believes that requiring nonlethal alternatives that are unacceptable to property owners because of high cost or because they have little chance of success would only encourage such persons to avoid seeking professional assistance and to possibly resort to unsound remedies that could have serious environmental consequences. Also, this alternative would be similar to the current program in many situations because many property owners have tried nonlethal alternatives such as dam removal or wire barriers prior to contacting WS. Thus, WS believes mandating nonlethal methods before implementing lethal methods could actually be counterproductive in many situations.

2. Leghold traps, snares, and body-gripping traps are inhumane.

The EA addressed humaneness of control techniques at length in section 2.2.2 and in Chapter 4 for each alternative. WS recognizes that the above methods are viewed as inhumane by some people. However, they remain essential components of the means of resolving those damage situations in which the only feasible remedy is to remove the problem animals. Other means of removal such as shooting or using cage-type traps are much more labor intensive and costly in most situations or, in the case of shooting, may not be allowed because of human safety considerations, and requiring their use in lieu of the above capture methods would reduce the damage situations in which WS could provide assistance. Such a reduction could lead to property owners becoming frustrated and resorting to home remedies that might be less environmentally sound as discussed in the EA. Thus, discontinuing the use of the above capture devices could actually lead to greater environmental harm and greater impacts on nontarget wildlife. WS believes that, until other cost-effective methods that are perceived as more humane are developed, the above capture devices should remain available for use as part of an integrated approach to resolving aquatic rodent damage.

This commentor also expressed concern that relying on drowning as a means of killing trapped aquatic rodents is inhumane. The commentor cited Gilbert and Gofton (1982) who concluded that body-gripping (e.g., Conibear) traps were more humane for taking beaver than drowning sets using leghold traps. Although leghold traps are occasionally used by WS to capture beaver, body-gripping quick-kill type traps are used far more often. In FY 1998, 86 percent of beaver were taken by body-gripping traps or shooting, and only 0.5% were taken by leghold traps. Thus, the method perceived by the commentor as more inhumane is used by WS to an extremely minor degree. In general, leghold traps are used in situations where the beavers appear to be wise to other capture methods, and are not a primary method of choice for capturing beaver in the OK WS program. The WS program continues to participate in the research and development of alternative wildlife capture methods in the hope that methods that are both effective and more acceptable to persons such as this commentor can be developed and brought into use.

3. Zinc phosphide for control of muskrats and nutria is inhumane.

WS acknowledges that some persons consider this chemical to be inhumane. However, it is the only chemical registered by the EPA and state pesticide agencies for control of muskrat and nutria. In those situations where a reduction in a local population of one of these species is necessary, other alternatives such as shooting or trapping are much more labor intensive and costly and may not be as successful as use of zinc phosphide baits. This method has not been used by the OK WS program in recent years, and it is expected that the need for its use will remain exceedingly low in the State. Also, the baiting strategy used with this method relies on prebaiting with nontoxic bait to assure it is being accepted by the target species

and on the use of floating rafts which limits access to the bait to aquatic rodent species. Thus, concerns about the humaneness of this method and concerns about nontarget animals being affected are already mitigated to a great degree. Nevertheless, this method may be used by WS to reduce local populations of these two species under the current program alternative, and persons with similar attitudes as this commentor would continue to view its use as inhumane.

No substantive changes to the predecision EA are deemed necessary. Therefore, the predecision EA is hereby designated as the final EA for this proposal.

### Major Issues

Several major issues were deemed relevant to the scope of this EA. These issues were consolidated into the following five primary issues to be considered in detail:

1. Effects on Target Aquatic Rodent Species Populations
2. Effects on Nontarget Species Populations, Including T&E Species
3. Humaneness of Control Techniques
4. Effects of Beaver Dam Removal on Wetland Wildlife Habitat
5. Effects of ARDM Methods on Public Safety

### Alternatives Analyzed in Detail

Six potential alternatives were developed to address the issues identified above. Seven additional alternatives were considered but not analyzed in detail. A detailed discussion of the anticipated effects of the alternatives on the objectives and issues is described in Chapter 4 of the EA. The following summary provides a brief description of each alternative and its anticipated impacts.

**Alternative 1. Continuation of Current Program (No Action).** Consideration of the No Action alternative is required under 40 CFR 1502.14(d), and provides a baseline for comparing the potential effects of all the other alternatives. This alternative allows for WS to use all currently authorized management methods in an integrated approach to resolve aquatic rodent damage problems in the State.

**Alternative 2. No Federal WS ARDM.** This alternative would consist of no federal involvement in ARDM in the State -- neither direct operational management assistance nor technical assistance to provide information on nonlethal and/or lethal management techniques would be available from WS. A portion of the formerly federal ARDM responsibility would probably be born by the remaining state agency programs. Private individuals would increase their efforts which would mean more ARDM would probably be conducted by persons with less experience and training, and with little oversight or supervision. Effectiveness and selectivity would probably be lower than Alternative 1. Risks to the public and to nontarget and T&E species would probably be greater than Alternative 1. Persons who perceive capture methods used by WS as inhumane would probably view this alternative as more acceptable than Alternative 1; however, animal suffering could actually be greater because lethal methods would be used by less experienced individuals in many cases, and more persons would likely resort to illegal methods such as unregistered toxicants that could potentially cause more overall suffering of target and nontarget animals. Risks to established wetland wildlife habitats would probably be slightly greater than Alternative 1.

**Alternative 3. Technical Assistance Only.** Under this alternative, WS would not provide any direct control assistance to persons experiencing aquatic rodent problems, but would instead provide only advice, recommendations, and, in some cases, limited technical supplies or equipment. ARDM would likely be conducted by persons with little or no experience and training, and with little oversight or supervision. Risks to the public and to nontarget and T&E species would probably be somewhat more than Alternative 1 but slightly less than or about the same as Alternative 2, and effectiveness and selectivity would probably be lower. Persons who perceive capture methods used by WS as inhumane would probably view this alternative as more acceptable than Alternative 1, but less than or perhaps equal to Alternative 2; however, actual effects on animal suffering could be greater than Alternative 1 and less than Alternative 2 for reasons similar to those presented in the previous paragraph. Risks to established wetland wildlife habitats would probably be slightly greater than Alternative 1, but less than Alternative 2.

**Alternative 4. Nonlethal Control Required Before Lethal.** This alternative would allow no use of lethal methods by WS as described under the proposed action until nonlethal methods have been employed in a given damage situation and found to be ineffective or inadequate. Property owners and state agencies would still have the option of implementing lethal control measures without a requirement that nonlethal methods be conducted first. Risks to the public and to nontarget and T&E species would probably be somewhat more than Alternative 1, somewhat less than or about the same as Alternative 2, and about the same as or more than Alternative 3. Persons who perceive capture methods used by WS as inhumane would probably view this alternative as more acceptable than Alternative 1, less than or perhaps equal in acceptability to Alternative 2, and less acceptable than alternative 3. However, actual effects on animal suffering could be greater than Alternative 1, less than Alternative 2, and greater than or about the same as Alternative 3 for reasons similar to those presented in the previous two paragraphs. Risks to established wetland wildlife habitats would probably be slightly greater than Alternative 1, less than Alternative 2, and less than Alternative 3.

**Alternatives considered but not analyzed in detail were:**

**Compensation for Aquatic Rodent Damage Losses.** This alternative would require the establishment of a system to reimburse resource owners for damage caused by aquatic rodents. This alternative was eliminated from further analysis because no federal or state laws currently exist to authorize such action and because of other drawbacks discussed in the EA and the WS FEIS.

**Bounties.** Bounties are the payment of funds for killing animals of certain species that cause or are suspected of causing economic losses. This alternative was eliminated from further analysis because it is not supported by Oklahoma State agencies such as ODWC and ODA nor is it supported by WS because of problems discussed in the EA.

**Eradication and Long Term Population Suppression.** An eradication alternative would direct all WS program efforts toward total long term elimination of beaver, muskrat, and/or nutria within large defined areas or across the entire State. This alternative was eliminated from further analysis because WS, ODWC and ODA oppose eradication of any native wildlife species, and because it is generally impossible to achieve for native and well-established nonnative species such as nutria. Long term population suppression is not a desired goal of state agencies or of WS for the State as a whole but could be implemented for localized areas prone to aquatic rodent damage under the current program alternative. The impacts of localized population suppression are analyzed in the EA.

**Reproduction Control.** This alternative would have involved controlling populations of aquatic rodents by chemical or surgical means. It was rejected for detailed analysis because currently available methods are not practical or are too expensive for large-scale field application, the animals that are currently causing damage in a given situation remain to continue causing damage even after being sterilized, and no chemical reproductive inhibitors are legal for use for any of the aquatic rodent species.

**Biological Control.** This alternative would have called for the introduction of predators or other biological agents to control populations of aquatic rodents. It was rejected for detailed analysis because introduced predators have not been effective in the past, because certain species of reintroduced predators could pose a hazard to people and their pets (e.g., alligators), and because no other biological agents have been researched or approved for controlling aquatic rodent species.

The effects of implementing the proposed action, when added to the other past, present, and reasonably foreseeable future actions, will not significantly affect the quality of the human environment. This determination takes into consideration the following factors:

1. Aquatic Rodent Damage Management, as conducted by WS in the State of Oklahoma, is not regional or national in scope.
2. Based on the analysis documented in the EA, the impacts of the ARDM program will not significantly affect the human environment.
3. The proposed action will not have a significant impact on unique characteristics such as park lands, prime farm lands, wetlands, wild and scenic areas, or ecologically critical areas. Built-in mitigation measures that are part of WS's standard operating procedures and adherence to laws and regulations that govern impacts on wetlands will assure that significant adverse impacts on established wetland areas are avoided.
4. The proposed action will not significantly affect public health and safety. Concern for the effects of WS ARDM methods on public safety was addressed in the EA. Risks to the public from WS methods were determined to be low in a formal risk assessment (USDA 1994, Appendix P).
5. The effects on the quality of the human environment are not highly controversial. Although there is opposition to ARDM, this action is not controversial in relation to size, nature, or effects. Based on consultations with other resource professionals, the proposed action is not likely to cause a controversial disagreement among the appropriate resource professionals.
6. Mitigation measures adopted and/or described as "part of the proposed action" minimize risks to the public, prevent adverse effects on the human environment, and reduce uncertainty and risks. Effects of ARDM methods and activities, as proposed, are known and do not involve uncertain or unique risks.
7. The proposed action does not establish a precedent for future actions. This action would not set a precedent for future aquatic rodent management that may be implemented or planned within the State. Effects of the proposed action are minor and short-term in nature and similar actions have occurred previously in the State without significant effects.
8. The number of animals taken (both target and nontarget) by WS annually is small in comparison to total

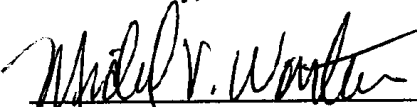
populations. Adverse effects on wildlife or established wetland wildlife habitats would be minimal.

9. The EA discussed cumulative effects of WS ARDM on target and nontarget species populations and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within the State.
10. The taking of target species in the State is not an irretrievable or irreversible loss of a resource. The environmental consequences chapter of the EA discusses the effects of the proposed action and concludes that WS take of target species is insignificant to overall populations.
11. Potential effects on T&E species were analyzed and discussed under each alternative. WS has taken no T&E species in the State. WS has consulted with the U.S. Fish and Wildlife Service and abides by and will abide by Reasonable and Prudent Alternatives and/or Mitigation Measures that have resulted from or will result from such consultation to avoid significant adverse impacts to T&E species. Mitigation developed as part of that consultation, or appropriate mitigation that may be established as the result of further consultations, will be implemented to avoid jeopardy or significant adverse impacts.
12. The proposed action is consistent with state and federal laws that provide for or restrict WS ARDM. Therefore, WS concludes that this project is in compliance with Federal, State and local laws for environmental protection.

#### DECISION

I have carefully reviewed the Environmental Assessment (EA) prepared for this proposal, and it is my determination that the proposed action does not constitute a major Federal action and will not significantly affect the quality of the human environment. As such, an environmental impact statement will not be prepared. Therefore, it is my decision to implement the proposed action as described in the EA.

As stated previously herein, no substantive changes to the analysis in the predecision EA were deemed necessary based on public comments received, and the predecision EA is hereby designated as the final EA for this proposal. Additional copies of the EA are available upon request from USDA, APHIS, WS, 2800 N. Lincoln Blvd., Oklahoma City, OK 73105.



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3-9-99

Date